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WHITE & CASE LLP  
PATENT DEPARTMENT  
1155 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036

EXAMINER
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SPOONER, LAMONT M

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 11/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/900,306

Applicant(s)

WENEGRAT ET AL.

Examiner

Lamont M Spooner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Fig. 2 Item 208, Fig 4 Items 401 and 403. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 12, 13, 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Wical (US Patent No. 5,940,821 filed May 21, 1997).

As per **claim 1**, Wical discloses a method of generating a cross-linked keyphrase ontology database comprising the steps of:

- a. defining at least one keyphrase (Col.8.lines 55-57, Fig 2 item 205).
- b. representing the keyphrase by a keyphrase node in an ontology (Col.18.lines 58,59, Fig 8B "Food and Agriculture").
- c. cross-linking the keyphrase node to at least one second keyphrase node, wherein the second keyphrase node represents a second keyphrase in a second

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ontology (Col.21.lines 19,20-“French Chefs” is cross-linked to “French Dishes” or “Food and Agriculture” is cross-linked to “Dairy Products”).

d. repeating steps (b) – (c) for each keyphrase defined in step (a)  
(Col.18.lines 54, 55).

As per **claim 2**, Wical discloses all of the limitations of claim 1 of which claim 2 depends. Wical further discloses:

the keyphrase in step (a) is generated by parsing a text (Col.8.lines 44-54).

As per **claim 3**, Wical discloses all of the limitations of claim 1 of which claim 3 depends. Wical further discloses:

the keyphrase in step (a) is selected from a group consisting of nouns, adjectives, verbs and adverbs (Col.8.lines 46-50).

As per **claim 4**, Wical discloses all of the limitations of claim 1 of which claim 4 depends. Wical further discloses:

the keyphrase in step (a) and the second keyphrase have at least one word in common (Col.12.lines 28-33, Fig 9b “French Chefs” and “French Dishes”).

As per **claim 5**, Wical discloses all of the limitations of claim 2 of which claim 5 depends. Wical further discloses:

the text is in the English language (Fig 9b “French Chefs”).

As per **claim 6**, Wical discloses a method of indexing (Col.29.lines 52-54, Col.30.lines 6-10, 13-15, 20-22, Fig. 13 item 770) a retrievable object in a cross-linked keyphrase ontology database comprising the steps of:

a. representing the retrievable object by an object node in an ontology (Fig 6 "Louvre").

b. cross-linking the object node to a keyphrase node (Fig 4 "Louvre is cross-linked to "France"), wherein the keyphrase node represents a keyphrase node in a second ontology ("France" is in a different ontology) and the keyphrase is related to the retrievable object.

As per **claim 7**, Wical discloses all of the limitations of claim 6 upon which claim 7 depends. Wical further discloses:

the keyphrase is determined by parsing a text related to the retrievable object (Col.18.lines 23-27).

As per **claim 8**, Wical discloses all of the limitations of claim 6 upon which claim 8 depends. Wical further discloses:

the retrievable object is a document (Col.27.lines 9-11).

As per **claim 12**, Wical discloses a method of searching a cross-linked keyphrase ontology database comprising the steps of:

a. parsing (Col.13.lines 55-58) a natural language statement (Col.13.lines 43-45) into a structured representation, wherein the structured representation comprises at least one keyphrase (Col.13.lines 45, 46).

b. searching (Col.18.lines 15, 16-knowledge base search) the cross-linked keyphrase ontology database for at least one object node (Fig 4 "Louvre"), wherein the object node is cross-linked to a keyphrase node representing a second keyphrase (Fig

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6 "France"), wherein the second keyphrase matches the keyphrase parsed in step (a) (Fig 6 "France" matches "Western Europe");

c. defining a search result as a retrievable object, wherein the retrievable object is represented by the object node (Col.27.lines 8-13).

As per **claim 13**, Wical discloses all of the limitations of claim 12 upon which claim 13 depends. Wical further discloses:

the search result is displayed to a user in a list (Col.24.lines 9,15,16).

As per **claim 15**, Wical discloses all of the limitations of claim 12 upon which claim 15 depends. Wical further discloses:

the natural language statement is a query (Col.13.lines 44, 45).

As per **claim 16**, Wical discloses all of the limitations of claim 12 upon which claim 16 depends. Wical further discloses:

the keyphrase in step (a) and the second keyphrase are identical (Col.9. lines 20-25, Case sensitive process-the keyphrase must be identical match to the knowledge base keyphrase).

As per **claim 17**, Wical discloses all of the limitations of claim 12 upon which claim 17 depends. Wical further discloses:

the keyphrase in step (a) and the second keyphrase are synonyms (Col.12.lines 16-21, semantic association-interpreted as synonym, see Johnson et al.).

As per **claim 18**, Wical discloses all of the limitations of claim 12 upon which claim 18 depends. Wical further discloses:

the keyphrase in step (a) and the second keyphrase are metonyms (Col.12.lines 16-21, semantic association-interpreted as metonym, see Johnson et al.).

As per **claim 19**, Wical discloses all of the limitations of claim 12 upon which claim 19 depends. Wical further discloses:

the natural language statement is in the English language (Col.13.lines 43, 44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 10, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wical in view of Burrows US Patent No. 6,105,019 filed July 26, 1999.

As per **claims 9 - 11**, Wical et al. discloses all of the limitations of claim 6. Wical does **not** disclose:

the method of indexing wherein the retrievable object is a web page, a pointer, or an executable computer program.

However, as it is well known in the art Burrows teaches indexing (processing Col.5.lines 59-67) of a page (defined as a data record) for retrieval (Col.6.lines 3, 4) and that a page can be a web page, a pointer, and an executable computer program (Col.5.lines 36-42). Wical and Burrows are analogous because they both belong to information retrieval methodology. Therefore it would have been obvious for a person

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skilled in the art to combine Wical with Burrows. The motivation for doing so would be to have the availability for several different types of information to be indexed and identified for retrieval.

As per **claim 14**, Wical et al. discloses all of the limitations of claim 12. Wical does **not** disclose:

the method of searching wherein the retrievable object is an executable computer program.

However, as it is well known in the art Burrows teaches a page (defined as a data record) can be an executable computer program (Col.5.lines 36-42). Wical and Burrows are analogous because they both belong to information retrieval methodology. Therefore it would have been obvious for a person skilled in the art to combine Wical with Burrows. The motivation for doing so would be to have the ability to search for a retrievable object (a page) that would be an executable program.

4. Claims 20 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saldanha et al. (US Application No. 09/757,075 filed January 8, 2001) in view of Wical.

As per **claim 20**, Saldanha discloses a method of disambiguating a syntactically ambiguous natural language statement comprising:

parsing the syntactically ambiguous natural language statement (14.paragraph 0180) into at least two structured representations (14.paragraph 0178, 0180), wherein the first structured representation comprises at least one first keyphrase and the second structured representation comprises at least one second keyphrase (14.paragraph 0180).



Saldanha does not disclose:

Searching a cross-linked keyphrase ontology database for a keyphrase node representing a third keyphrase, wherein the third keyphrase matches the first keyphrase or the second keyphrase

However, searching is well known in the art and Wical discloses a method of:

Searching (Col.18.lines 15, 16) a cross-linked keyphrase ontology database for a keyphrase node representing a third keyphrase (Fig 4 "Louvre"), wherein the third keyphrase matches the first keyphrase (Fig 4 "France") or the second keyphrase. Saldanha and Wical are analogous because they are both are information retrieval methodologies.

It is well known in the art the method of disambiguation. **Claim 20** steps **c-e** are implied by the definition of ambiguity and are obvious. Ambiguity is defined as "open to more than one interpretation"-American Heritage College Dictionary. It is obvious to one skilled in the art to disambiguate ("to establish a single grammatical or semantic interpretation for"- American Heritage College Dictionary) by having only one meaning between the two keyphrases selected at a time for the structured representation to be disambiguated. If only one structured representation of two keyphrases matches the third keyphrase then by definition the structured representation is disambiguated. If neither or both keyphrases simultaneously match the third keyphrase (object) then they are by definition ambiguous, thereby determining that the syntactically ambiguous natural language statement cannot be disambiguated.

Therefore it would have been obvious to a person skilled in the art to combine Saldanha with Wical. The motivation for doing so would have been to disambiguate a syntactically ambiguous natural language statement by finding an exclusive match otherwise designating the search unable to be disambiguated.

As per **claim 21**, Saldanha and Wical teach everything as claimed in claim 20. Saldanha further discloses:

the syntactically ambiguous natural language statement is a query (14.paragraph 0175, Fig. 4 item 410).

As per **claim 22**, Saldanha and Wical teach everything as claimed in claim 20. Saldanha further discloses:

the method of disambiguating (choosing the best map of the senses parsed) wherein the third keyword (object or product-the entries being retrieved) is identical (6.paragraph 0072, "to the extent that such interest is well expressed in the original text input."-which could be identical) to the first keyphrase or second keyphrase (the parsed senses-6.paragraph 0070 "The parser 210 parses the text input by the user into all possible parses "- interpreted to be the first and second keyphrase.).

As per **claim 23**, Saldanha and Wical teach everything as claimed in claim 20. Saldanha further discloses:

the method of disambiguating (choosing the best map of the senses parsed) wherein the third keyword (object or product-the entries being retrieved) is a synonym (6.paragraph 0072, "to the extent that such interest is well expressed in the original text input."-which could be a synonym) to the first keyphrase or second keyphrase (the

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parsed senses-6.paragraph 0070 "The parser 210 parses the text input by the user into all possible parses "- interpreted to be the first and second keyphrase.).

As per **claim 24**, Saldanha and Wical teach everything as claimed in claim 20.

Saldanha further discloses:

the method of disambiguating (choosing the best map of the senses parsed) wherein the third keyword (object or product-the entries being retrieved) is a metonym (6.paragraph 0072, "to the extent that such interest is well expressed in the original text input."-which could be a metonym) to the first keyphrase or second keyphrase (the parsed senses-6.paragraph 0070 "The parser 210 parses the text input by the user into all possible parses "- interpreted to be the first and second keyphrase.).

As per **claim 25**, Saldanha and Wical teach everything as claimed in claim 20.

Saldanha further discloses:

The syntactically ambiguous natural language statement is in the English language (14.paragraph 0180 "The boy helped the girl with the suitcase.")

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M Spooner whose telephone number is 703/305-8661. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Ivars Smits can be reached on (703) 306-3011. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/305-3900.

lms  
10/17/03



**RICHEMOND DORVIL**  
**SUPERVISORY PATENT EXAMINER**